

DC TO AC POWER INVERTER with UPS



USER'S MANUAL

Please read this manual carefully before operating

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Remark: This is a general manual, please choose the relative parts for reference according to product & products.

*** Safety Explanation**

This equipment should be installed, adjusted, and serviced by qualified electrical maintenance personnel who familiar with the construction and operation of the equipment and the hazards involved. Failure to observe this precaution may result in equipment and appliance damage, even bodily injury.

1. Do not connect the unit to AC distribution wiring, such as your house wiring. And do not touch the electric conduction of output side.
2. Keep the unit in a cool environment. Ambient air temperature should be between -10 and 50 . Keep away from direct sunlight and heating vents.
3. Keep the unit away from water. Do not allow water to drip or splash onto the inverter. Do not insert or pull out plug with wet hands.
4. Keep the unit away from flammable materials or in any location where may accumulate flammable materials, such as the chemical. Do not put the unit on the electric conduction.
5. With heavy use, the unit will become warm and possibly hot, so keep it away from any heat sensitive materials.
6. Make sure the opening to the fan and the vent holes are not blocked.
7. Do not open the inverter, except professional. Especially in the condition of its working or standby. High voltages are inside.
8. Use proper size wiring. High power inverter can draw many amps from the DC source and melt wires it not fused and sized properly.
9. Make sure connecting the inverter with battery or batteries correctly. Reverse polarity connection may melt inverter fuse. Switch off the switch when so not use the equipment to reduce unnecessary waste.
10. Before cleaning the equipment, switch off power, clean with dry cloth. Do not use wet cloth or cleanser to clean it.

*** How to use the inverter**

1. Power supply selection.

It must get power from storage battery, batteries or car cigarette lighter. Input voltage can be 12V /24V /48V, subjecting to the products (if input voltage higher 3/5 times than rated voltage will cause the inverter damage.)

2. Connect inverter to power supply.

Set the switches at OFF position (including inverter and appliances). Get power from battery or batteries. Black connecting pole (-) of inverter, and the red U shape end with the red connecting pole (+).

3. Connect inverter to electronically appliances.

Make sure the load power within rated power of inverter and start power should not exceed peak power of inverter.

When having connect inverter with appliances and power supply, switch on the inverter and appliances. It is normal to restart again and again and the red light flashes over and over as the inverter open. Please turn it off or turn off part of the appliances, or change a bigger power one.

*** Protection function**

A. Input low voltage protection.

- a. When battery voltage is low, buzzer will alarm, which indicates DC power supply voltage is descending and batteries need reach.
- b. When input voltage is below $10V \pm 0.5V$ (for 12V input inverter) / $24V \pm 1.0V$ (for 24V input inverter). AC output will be automatically shut off, buzzer alarm and ALARM / WARNING light turns red at the same time.

B. Input over voltage protection.

When input voltage reach $15V \pm 0.5V$ (for 12V input inverter) / $30V \pm 1.0V$ (for 24V input inverter). ALARM / WARNING light turns red and AC output will be shut off automatically.

C. Short circuit protection.

When short circuit hap panned, output will be shut off and ALARM / WARNING light turn red.

D. Overload protection.

When overload happened, output will be shut off and ALARM / WARNING light turn red.

E. Reverse polarity input protection.

When battery terminals are reverse connected, fuse will be melted to protect appliances

F. Charge thermal protection.

When radiator temperature exceeds 50 the inner fan sill automatically start up to cool the inverter.

*** Common troubles and solutions**

A. Acoustics buzzer alarms.

When applying the inverter to acoustics, some inferior acoustics will buzzer, that is because the output wave from of this inverter is modified sine wave. If it is pure sine wave, that is because of overload. Please wait 20 seconds. After then if it still abnormal, turn it off to avoid wasting.

B. TV interference.

You can get minimum interference though filter. In some occasions, very fait interference will become obviously, you can try as follows.

- a. Let inverter far from TV and TV antenna.
- b. Try to change the direction of TV signal cable and TV antenna to reduce the interference to minimum.
- c. Select screen cable antenna with high quality.

C. Inverter no response.

Poor connection between batteries or inverter, reconnect them.

D. Output voltage very low.

- a. Overload. Load power exceeds rated power, shut off part of the appliances and restart inverter.
- b. Input voltage too low. Make sure input voltage is within the rated range.

E. Low voltage alarm.

- a. Battery no power. Recharge the battery.
- b. Battery voltage too low or poor connection.
- d. Recharge the batteries, check terminal connection or clean terminals with a dry cloth.

F. Inverter no output.

- a. Battery voltage too low, recharge or replace the batteries.
- b. Load power too high, shut off part of the appliances and restart inverter.
- c. Inverter thermal protection. Cool the inverter and place it in the place with good ventilation.
- d. Inverter failure to start, restart the inverter.
- e. Reverse polarity connection and fuse melted, replace the fuse with a same spec fuse and reconnect.

G. Inverter does not work.

Check the power switch, fuse and battery connecting cables or cigarette lighter.

* AC / DC Side panel

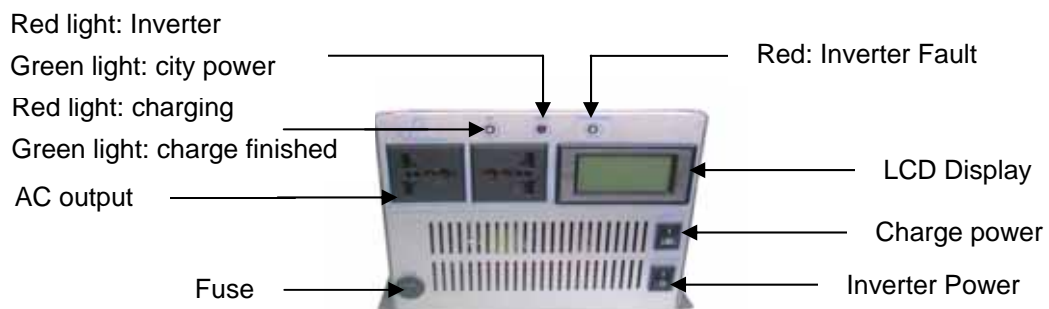
This is a general manual. The output voltage can be 110V / 60Hz or 230V / 50Hz, please take the relative part for reference. This manual is just for explanation use, which is not necessarily same to product.

Indicator light on AC side:

Work / Working: When inverter is working, this light turns on.

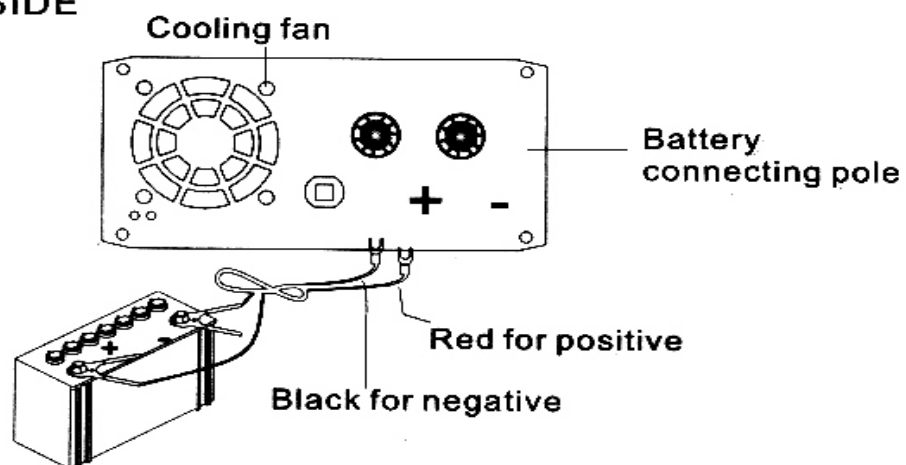
Alarm / Warning: When low voltage, over voltage, short circuit, overload, or thermal protection happened, this light turns on.

Charging: For inverter with charge function, when charging battery / batteries, this light turn on and flash, when flash is not obvious, charging complete.

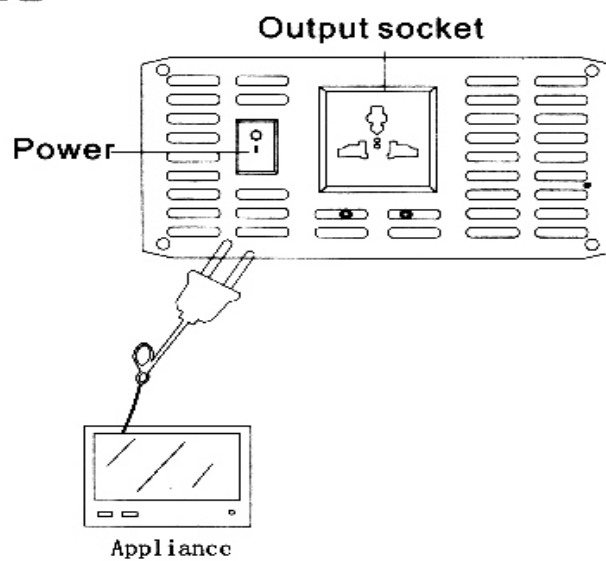


PANELS

● DC SIDE



● AC SIDE



*** Inverter specifications (For example: BPUPS-1500W)**

Model		BPUPS-1500W
AC Input	AC voltage	100V AC
	Frequency	50Hz / 60Hz
Charge Output	Charge current	10A
	Charge voltage	DC13.8~14.5 Volt
	Charge mode	Equalize/Float
DC Input	DC Voltage	DC 12 Volt
	Voltage Range	11-15VDC
	No Load Current Draw	< 8W
	Efficiency	> 87%
	DC Connector	Cables With Clips
Output	AC Voltage	100VAC
	Continuous Power	1500W
	Peak Power	3000W
	Waveform	Pure Sine Wave
	Frequency	50Hz / 60Hz
	THD	<3%
Protection	Low Voltage Alarm	10.2V DC~10.8V DC
	Low Voltage Shut Down	9.5V DC
	Over Load	Shut Off Output
	Over Voltage Shut Down	15.5V
	Over Thermal	Shut Off Output Automatically
Environment	Working Temperature	-10°C ~ +50°C
	Working Humidity	10%-90%RH
	Storage Temperature	-20°C ~ +50°C
Package	Machine Size(mm)	380*180*150mm
	Packing Size(mm)	460*265*240mm
	Net Weight(kg)	5.8kg
	Gross Weight(kg)	6.5kg
	Packing Mode	Carton
Other	Start	Soft Start
	Cooling Ways	Cooling Fan

* **Warranty card**

In the normal case of use of this product, any raw materials or the production process by the quality problems caused by the date of purchase within one year, the unit responsible for the free repair. Once the warranty period, service center maintenance than I repair or modify the product, or improper installation, improper input voltage, improper use, accident or natural disaster, caused by the other person does not warranty product failure.

Warranty Card

Name _____

Brand _____

Type / Number _____

Origin _____

Date of Purchase _____

Installation Date _____

Maintenance records

Maintenance Date _____

Fault conditions _____

Maintenance and results:

Tip: When you repair the machine purchase certificates. For your convenience, care, please purchase certificate attached to the bottom of the space.

